

### REMARKS

Reconsideration of this application, in view of the foregoing amendments and the following remarks, is respectfully requested.

#### Specification

The disclosure is objected to because of certain informalities. Applicant has amended the specification to remove the informality.

#### Claim Rejections - 35 USC § 112

Claims 1-12 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 1 and 6 and canceled claim 18 without prejudice and disclaimer of the subject matter recited therein. Accordingly, Applicant respectfully requests the withdrawal of the rejection under 35 USC §112, second paragraph for these claims.

#### Claim Rejections - 35 USC § 102

Claims 1-3, 5-8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al. (U.S. Patent No. 6,246,369). Applicant respectfully traverses these rejections.

To anticipate a claim, the reference must teach each and every limitation of the claim. MPEP §2131. As to claim 1, Brown et al. does not teach every limitation of the claim.

In rejecting claim 1, the Examiner has stated that Brown et al. teaches "collimating the beam in a desired direction such that the antenna is used to send and receive signals from a desired direction." (Emphasis added). Applicant respectfully disagrees. Brown teaches a phased array antenna with a lens that is configured to control the phase relationship of a received signal (see col. 2, lines 53-56). Further, Brown clearly states that the lens maintains the special diversity in phase between signals arriving from different directions. Further, Brown et al.

teaches using “lenses of different shapes and lenses constructed using varying dielectric constants to produce a similar effect on the phase relationship between the antenna elements.” (See col. 3, lines 2-5). Furthermore, nowhere in the cited sections Brown et al. describes a lens collimating beam in a desired direction such that said antenna sends and receives signals from a desired direction. Accordingly, claim 1 and those depend therefrom are patentably distinguishable from Brown et al.

Claim 6 has been rejected in the manner of claim 1. Accordingly, claim 6 and those depend therefrom are patentably distinguishable from the cited reference for at least the same reasons as claim 1.

Claim Rejections - 35 USC § 103

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (Cited above). Applicant respectfully traverses this rejection.

Claims 4 and 9 depend from claims 1 and 6 respectively. Accordingly, claims 4 and 6 are patentable distinguishable from Brown et al. for at least the same reasons as claims 1 and 6.

Further, there are three basic criteria to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a). First, there must be some suggestion or motivation in the cited reference to modify or combine their teachings; second, there must be reasonable expectation of success; and third, the prior art references must teach or suggest all the claim limitations. See M.P.E.P §2142. As to claims 4 and 9, Brown et al. neither suggests modifying its teaching nor there can a reasonable expectation of success for the modification suggested by the Examiner.

As to claims 9 and 4, the Examiner has stated that “It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplication of parts, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.” (Emphasis added). Applicants respectfully point to the Examiner that first, Brown et al. is not directed towards collimating beams in a desired direction. Second, Brown et al.’s focus is on maintaining the spatial diversity in phase relationship of a signal received by antenna elements. Thus, Brown not only does not teach using lenses for directional

collimating but it teaches away from using multiple lenses. Further, using multiple lenses in Brown et al. will mean that the superstrate 22 will have to be duplicated for the antenna elements. However, the superstrate 22 has a defined high dielectric constant and is bolted to the substrate 12 or base holding the substrate 12 (*see col. 3, lines 55-61*).

Thus, there is no need for additional lenses in Brown et al. and in fact, the way the apparatus is defined in figure 2, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to add additional lenses in Brown et al.'s equipment. Accordingly, claims 4 and 9 are further patentably distinguishable from Brown et al.

Applicants have submitted new claims 19-26 based on the allowable subject matter identified by the Examiner. Applicant authorizes the Commissioner to charge applicable additional claim fees to Applicant's deposit account number 20-0668. Applicant believes this application and the claims herein to be in a condition for allowance. Should the Examiner have further inquiry concerning these matters, please contact the below named attorney for Applicant.

Respectfully submitted,



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